2022 Summer Symposium - Sessions & Speakers

Wednesday, July 20, 2022

8:30 a.m. - Anne Arundel County Biosolids Master Plan

Speakers: Zayneb Mohamed, Hazen & Sawyer, and James Howard, Anne Arundel County



Zayneb Mohamed is an assistant engineer for Hazen and Sawyer. She recently graduated with a Bachelor's degree in Chemical and Biomolecular Engineering from Johns Hopkins University and since then has been working under Hazen, mainly in the wastewater field. During her time at Hazen, Zayneb has worked on various projects involving wastewater equipment upgrades, water treatment plant design, odor control, and biosolids management.



James Howard received his Bachelor's degree in Civil Engineering from the University of Texas at Austin. Have worked in the Water and Wastewater industry for 16 years. He has worked for Anne Arundel County MD for the past 10 years as a project manager/engineer manager delivering capital water and wastewater projects.

9:00 a.m. - Biosolids Planning with Innovative Technologies for a Circular Economy Speaker: Dave Parry, Jacobs



Dr. Dave Parry is a vice president and senior fellow technologist at Jacobs and their leading expert on anaerobic digestion, with over 40 years of experience in the industry. He earned his Bachelor and Master's degree in mechanical engineering from Brigham Young University and his Ph.D. from the University of Illinois at Urbana-Champaign and is a registered professional engineer in several states and provinces.

Dr. Dave Parry has been principal investigator for research on anaerobic digestion, co-digestion, pyrolysis, gasification, and combustion, including WERF's co-digestion project. He is a patent holder and co-inventor of methods to enhance biogas production from anaerobic digestion and was the lead author

of the chapter on anaerobic digestion in the published WEF/EPA/WERF Solids Process Design and Management Manual. He also served as the Chair of the Bioenergy Technology Subcommittee of WEF's Residuals and Biosolids Committee.

9:30 a.m. - Zero to Hero in Building a New Biosolids Land Application Program: A Case Study in North America

Speaker: James Dunbar, Lystek



JAMES DUNBAR, P.E. is the General Manager for California operations at Lystek International (US). Jim is a graduate of the University of Notre Dame (Civil & Environmental Engineering) and St. Xavier University (MBA) and a Professional Engineer with more than 25 years' experience in the management of solid waste and treatment of liquid wastes in the United States and Europe. Lystek is a Canadian-based firm specializing in providing solutions to biosolids and organics management, with facilities in Canada, California and the Midwest US. Jim's role is overall site operations, engineering and business development for Lystek in the US market.

10:30 a.m. - Keynote Session - Panel - Public face of Biosolids

Speakers: Lina Zeldovich, Author with Chicago Press, Maile Lono-Batura, WEF, and Nora Goldstein, BioCycle



Lina Zeldovich grew up in a family of Soviet scientists, watching her grandfather fertilize their family farm with composted sewage—and thought that the whole world did the same. Now a prominent journalist, author and Columbia J-School alumna, she has written several hundred stories about science, sustainability and health for major publications including the Smithsonian, Scientific American, BBC, Reader's Digest and The New York Times, and appeared on radio and television. After winning several awards for covering the science of poo, she decided to dive deeper, investigating novel solutions to the world's oldest problem—keeping humans free from their own excrement. Her book, The Other Dark Matter: The Science and Business of Turning Waste into Wealth, was #1 Amazon bestseller in the Environmental Engineering category for nearly 2 months. When she isn't digging into sewage recycling in North America, India or Madagascar, she lives in New York City and keeps a compost pile in her backyard.



Maile Lono-Batura is the Director of Sustainable Biosolids Programs at the Water Environment Federation. Maile joined WEF in 2021 after serving as Executive Director of Northwest Biosolids for 22 years. She serves as a central coordinator and network leader for WEF's biosolids programs, finding synergies across organizations to elevate impactful movements. Maile earned her Bachelor's in Community & Environmental Planning with an Environmental Studies Minor from the Univ. of WA. She received her Master's in Nonprofit Leadership from Seattle Univ. and is a Board-Certified Env. Scientist with the American Academy of Environmental Engineers and Scientists Board (AAEES). She was recently recognized as a AAEES 40 Under 40 Rising Stars Class of 2022.



Nora Goldstein is Editor/Publisher of BioCycle CONNECT® and BioCycle.net, the Organics Recycling Authority. Nora is in her 5th decade of working at BioCycle. She received the US Composting Council's Hi Kellogg Award for Outstanding Service to the Composting Industry, and the American Biogas Council's Biogas Visionary Award.

11:30 a.m. - An update on PADEP General Permit developments and other regulatory news Speaker: John Uzupis, Synagro

1:30 p.m. - Is it possible to remove PFAS from Biosolids? A review of different PFAS removal technologies

Speaker: Ramola Vaidya, HDR



Ramola Vaidya is a Water/Wastewater Process Engineer with HDR in the Vienna, VA office. She has been working with HDR for the past two years on water, wastewater and reuse water treatment process, design, research and pilot projects. Prior to HDR she worked for four years at Hampton Roads Sanitation District on their managed aquifer recharge project, SWIFT. She has a PhD and Master's degree in Civil and Environmental Engineering from Virginia Tech.

2:00 p.m. - Decoding the fate and transport of PFAS compounds in sludge undergoing thermal oxidation - Laboratory verification of full scale application

Speaker: Jon Orr, Veolia



Jon Orr is Product Manager, for the Biosolids & Bioenergy team at Veolia Water Technologies, a world leader dedicated to water, waste and energy management & resource recovery. He has a bachelor of science degree in chemical engineering from Cornell University, and an MBA from the University of Houston. He has 15 years of work experience in wastewater residuals and sludge treatment technologies, and over 30 years in project & operations management, product & technology development in chemicals, plastics, mining and pharma industries. He has served in a variety of roles in business, process & technology development, and project management

2:30 p.m. - PFAS Emissions Testing for Biosolids Pyrolysis

Speaker: Bill Brower, Brown & Caldwell



Bill Brower, a licensed Professional Engineer in several states and licensed wastewater operator, specializes in the management of biosolids and other organic residuals. He is a Senior Biosolids Engineer at Brown and Caldwell, focusing on biosolids master planning and design. Previously, he managed DC Water's Bloom biosolids program, leading a team in developing a suite of products and marketing North America's first THP biosolids. He is the inaugural chair of the North East Biosolids and Residuals committee on carbon trading and past chair of the WEF Greenhouse Gas subcommittee. Bill has a B.S. in Chemical Engineering from the University of Wisconsin and a Master's in Engineering for Sustainable Development from the University of Cambridge.

3:30 p.m. - Food Waste Co-Digestion Driven by Climate Change Mitigation

Speaker: Sarah Deslauriers, Carollo



Sarah is a licensed professional engineer and Vice President for Carollo, serving as their National Climate Change and Resilience Lead. Her 19-year career includes in-depth experience with regulations, biosolids management and innovation, greenhouse gas emission management, life cycle assessment, master planning, integrated water resources management, and project prioritization using decision analysis. Sarah has led various biosolids projects and understands the resources needed for solids treatment and management planning. She also has recent experience broadly assessing the viability of co-digestion and biogas utilization projects across California for the State Water Resources Control Board (SWRCB). Sarah is the former chair of WEF's GHG Subcommittee and more recently the Bioenergy Technology Subcommittee. Sarah's unique positions as program manager for the California

Association of Sanitation Agency's Climate Change Program and the Bay Area Biosolids Coalition give her insight into regulatory impacts on the wastewater industry, especially as it relates to solids treatment/management and biogas utilization.

4:00 p.m. - Sludge Conditioning and Renewable Natural Gas at the Capital Region, PA Water AWTF Speaker: Eric Auerbach, Arcadis



Eric is the National biosolids and biogas energy practice lead for Arcadis. He has a Bachelors in Biological and Environmental Engineering from Cornell University, a Masters in Environmental Engineering from the Univ of Wisconsin – Madison, and a Masters in Energy Engineering from the Univ. of Illinois-Chicago. He has spent his 17 year career helping wastewater utilities get the most out of the solids resources flowing through their plants. He's been fortunate enough to work with utilities large and small, including some of the largest treatment plants in the world in Detroit, Chicago, and New York City. He also hopes you really like his presentation.

4:30 p.m. - Gas to Grid - Virginia's First RNG Injection Facility

Speaker: DJ Wacker, RKK



DJ is a Project Manager at RK&K and has over 10 years of professional experience concentrated in the evaluation, design and construction of wastewater treatment plants. He has a bachelor's degree in physics and a master's degree in environmental engineering. His biosolids experience ranges from dewatering and thermal drying to anaerobic digestion to biogas utilization. DJ is a licensed Professional Engineer in five states and is a MABA board member.

Thursday, July 21, 2022

10:30 a.m. - Summary of operations data from the Morrisville Biosolids Gasification Pilot, PA Speaker: David Mooney, Ecoremedy



David E. Mooney is the inventor, CTO, and President of Ecoremedy. He is a Virginia Tech trained engineer with three decades experience in waste repurposing, renewable energy generation, energy conservation, and value-added product development. Mr. Mooney has earned global recognition for his expertise in advanced gasification and nutrient recovery, particularly pertaining to unconventional, problematic solid wastes. He heads Ecoremedy's Operations Office in Mechanicsburg, PA, near Harrisburg.

11:00 a.m. - Thermal hydrolysis at Clinton River Water Resource Recovery Facility: Two years operational experiences

Speaker: Paul Christy, Cambi



Mr. Christy has over 30 years of experience developing and deploying processes for treating wastewater biosolids. The last 10 years, he has been the General Manager overseeing the operations in North America for Cambi. Cambi has over a dozen facilities in operation or construction in the US and Canada.

11:30 a.m. - Unattended operation using unique design features & remote-monitoring and SCADA optimizes dryer capacity and performance Speaker: Rick Treleven, BCR



With over 35 years in Wastewater Treatment as an Environmental engineer Rick has designed Bio-Solids treatment solutions using conventional Anaerobic, and Aerobic Digestion for solids stabilization. Rick now supports both the Bio-Scru Indirect Dryer and the Neutralizer® system as a National PFRP Equivalent biosolids treatment system for Class A and AA and the CleanB as a National PSRP Equivalent process for Class B treatment.

Rick is also on the committee for the State of Wisconsin Bio-Solids Symposium, responsible for furthering education of regulatory compliance for proper handling, treatment, and disposal for biosolids in the State of Wisconsin.

1:30 p.m. - Using Sludge Rheology in Solids Systems Design, Planning, and Operation

Speaker: Tracy Chouinard, Brown & Caldwell



Tracy Chouinard has 8 years' experience in wastewater process, focusing on solids and energy. Tracy currently serves as a solids and energy process engineer specializing in data analysis, visualization and solids and energy systems process modelling and model development. Her project roles range from solids master planning to detailed design and process assessment and optimization, supporting clients nationally.

2:00 p.m. - Nutrient Recovery - Balancing nutrients

Speaker: Melissa Meyer, Hazen & Sawyer



Mrs. Meyer is a Principal Engineer at Hazen and Sawyer. She has a bachelor's degree in Environmental Engineering from Georgia Tech and a master's degree from UC Berkeley. Her studies focused on water and wastewater process engineering and design and have given her an extensive background in water chemistry and biological processes. Mrs. Meyer assists with many plant modeling, wastewater process engineering, and master planning projects providing both short-term solutions and pathways for the long-term planning horizon. She serves as the process mechanical design lead for major upgrades in the Southeast region for Hazen and Sawyer. Her work emphasizes collaboration and coordination with stakeholders to incorporate operator preferences and industry best practices.

2:30 p.m. - Thin Film Dryer – A Unique Biosolids Dryer

Speaker: Chip Pless, LCI



Chip Pless is the Sales Manager for Sludge Dryers at LCI Corporation based in Charlotte, NC. Prior to working for LCI Corporation, Chip worked for HUBER Technology, Inc. for 11 years with the last 7 years dedicated to biosolids processing including sludge screening, thickening, dewatering, and drying. He has authored papers for the Residuals and Biosolids Conference and been part of the WEF Dryer Task Force. Prior to HUBER he held positions in the automotive and automation industries. Chip has a Bachelor of Science degree in Mechanical Engineering from North Carolina State University. In his spare time Chip enjoys attending his children's activities and visiting state and national parks with his wife, Kadi.

3:30 p.m. - An Update on the BEAM Project

Speaker: Bill Brower, Brown & Caldwell



Bill Brower, a licensed Professional Engineer in several states and licensed wastewater operator, specializes in the management of biosolids and other organic residuals. He is a Senior Biosolids Engineer at Brown and Caldwell, focusing on biosolids master planning and design. Previously, he managed DC Water's Bloom biosolids program, leading a team in developing a suite of products and marketing North America's first THP biosolids. He is the inaugural chair of the North East Biosolids and Residuals committee on carbon trading and past chair of the WEF Greenhouse Gas subcommittee. Bill has a B.S. in Chemical Engineering from the University of Wisconsin and a Master's in Engineering for Sustainable Development from the University of Cambridge.

4:00 p.m. - Carbon Credits for (using) Biosolids?

Speaker: Scott Subler, ClimeCo



Scott Subler is Chief Science Officer for ClimeCo, a leader in the development and management of environmental commodities. Scott is a widely recognized scientific and policy expert in the areas of ecosystem carbon and nutrient cycling and management, soil ecology, and environmental credits, and has broad experience with the design, development, management, and finance of a wide-ranging variety of carbon offset project types.

In his academic career, Scott received a PhD in Ecosystem Ecology from Penn State University and served as a research scientist and professor at The Ohio State University. Subsequently, Scott founded and served as President of Pacific Garden Company, a producer and marketer of organic

soil fertility products. In 2005 he co-founded Environmental Credit Corp., which merged with ClimeCo in 2015. He has previously served on the Board of Directors for the US Composting Council and as a Trustee for the Compost Research and Education Foundation.